

**REMARKS**

**Allowable Claims**

Applicants gratefully acknowledge that claims 2 and 3 are allowed.

**Restriction**

Responding to Applicants' previous response, the Examiner alleged as follows:

In this application, the compound of claim 1, which is the special specification technical feature, is taught by the prior art and therefor does not make a contribution over the prior art. Therefore restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

However, the issue whether claim 1 is taught by the prior art and whether claim 1 make a contribution over the prior art is not determined yet. As explained below, claim 1 patentably distinguishes over the prior art.

The rule 37 CFR 1.475(b)(3) provides as follows:

(b) An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

...

(3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; . . .

As discussed below, not only claims 2 and 3 but also claim 1 patentably distinguish over the prior art. Claims 1-3 are directed to the product; claim 7 is directed to the "process specially adapted for the manufacture of the said product"; and claims 8-10 are directed to "use of the said

product.” Thus, the claims satisfy the combination of categories provided under and satisfy unity of invention.

Thus, the restriction requirement is not proper.

**Rejections under 35 USC §102(b) and 35 USC §103(a)**

**Claim 1 was rejected under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 USC §103(a) as being obvious over Lacerda et al., Solid State Ionics, 59 (1993), pages 257-262.**

Claim 1 has been amended as follows:

1. A  $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$  compound, which incorporates a negative hydrogen ion ( $\text{H}^-$ ,  $\text{H}_2^{2-}$ ,  $\text{H}_2^-$ ) at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or more, which has an electronic conductance equivalent to an electric conductivity of  $10^{-5} \text{ Scm}^{-1}$  or more at a room temperature.

Responding to Applicants' previous response, the Examiner alleged as follows:

Applicant argues that the Lacerda reference does not indicate that the material has an electronic conductance of  $10^{-5} \text{ S/cm}^{-1}$  or more or indicates irradiating with ultraviolet light. Figure 2 of the reference appears to indicate conductivity of the C12A7 within the claimed range of  $10^{-5} \text{ S/cm}^{-1}$  or more. Further the intent of Lacerda is to increase electrical conductivity C12A7. Irradiating with ultraviolet light is suggested by Hayashi.

(Office Action page 2).

In Lacerda et al., Fig. 2 shows net ceramic conductivity of 12C7A in the temperature range of about 400-1300°C. Extrapolating the curves, the conductivity of 12C7A at the temperature is well below  $10^{-5} \text{ S/cm}^{-1}$ .

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Thus, Lacerda et al. does not teach or suggest the present invention as recited in amended claim 1. For at least these reasons, claim 1 patentably distinguishes over Lacerda et al.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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